

# Flexible Magnetic Extrusions



Ask us about  
MuscleMag™ high  
energy strip and profiles.

## **Superior holding power.**

Magnum® flexible magnetic strip and custom profiles are thermoplastic, permanent magnetic extrusions manufactured with high-quality raw materials. We use a state-of-the-art magnetization process that provides superior holding power.

**Custom fabrication.** Magnum® brand strip is available in stock or custom widths, thicknesses and lengths. Our magnet is available either plain or with a variety of adhesive options including foam, rubber, free film, acrylic, and double-faced. We also offer cutting, scoring, chopping, and custom magnetization such as matched pole. Flexibility and other physical properties can be optimized for your specific applications. Choose either standard energy magnet or our MuscleMag™ high energy magnet.

**Flexibility.** Magnum® flexible magnetic profiles are an excellent alternative to ceramic magnets because of their adaptability to intricate engineering applications. Magnum® profiles are available in a variety of standard shapes and sizes. They also can be custom fabricated for special design and engineering applications.

**Our promise.** Magnum Magnetics provides superior customer service and high-quality flexible magnetic sheet, strip and custom profiles at competitive prices. That's our promise and your assurance of satisfaction from *The Force in Flexible Magnetics.*®



*The Force in Flexible Magnetics.*®



Quality Made  
in the USA

## Applications

Fastening Devices

Displays

Assembly Devices

Advertising Specialties

Hobbies

Nameplates

Sales Promotions

Screen Printing

Toys

Crafts

Novelties

...and many more!

## Product Specifications

### Standard Strip Product Line

Standard thicknesses range from .025" to .250" (.64 mm to 6.35 mm). Contact the factory for additional thicknesses and capabilities.

Standard widths: 1/2", 3/4", 1", 1 1/2", 2", and 3" (12.7 mm, 19.1 mm, 25.4 mm, 38.1 mm, 50.8 mm, and 76.2 mm). 4" (101.6 mm) width also available as standard in selected thicknesses. Custom widths available upon request.

Standard roll lengths: 100 ft., 150 ft., and 200 ft. (30.48 m, 45.72 m, and 60.96 m) – determined by thickness.

#### Standard Tolerances

Thickness: +/- .005" (.13 mm)\*\*\*

#### Widths:

0" to .999" = +/- .015" (0 mm to 25.3 mm = +/- .38 mm)

1" to 1.999" = +/- .020" (25.4 mm to 50.7 mm = +/- .51 mm)

2" to 2.999" = +/- .025" (50.8 mm to 76.1 mm = +/- .64 mm)

3" & greater = +/- .030" (76.2 mm & greater = +/- .76 mm)

Lengths: (custom cut) +/- 1% or +/- .015" (+/- 1% or +/- .38 mm) whichever is greater

### Strip Magnetization Formation

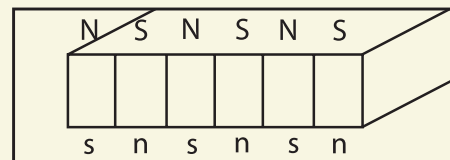
Thickness	Pole Spacing	Magnetic Pull*
.030" (.76 mm)	12 PPI	8.5# (50 g)
.045" (1.14 mm)	10 PPI	8.8# (52 g)
.060" (1.52 mm)	10 PPI	10.8# (63 g)

\*Minimum pounds pull per lineal foot of 1" (25.4 mm) wide at zero air gap (grams pull per square centimeter) standard energy. Contact us for information about average pull strengths and the recommended product for your application.

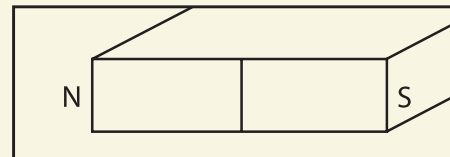
\*\*Other custom pole configurations are also possible.

\*\*\*Tolerance is +/- .003" (.07 mm) on die cut strip .030" (.76 mm) thick or less.

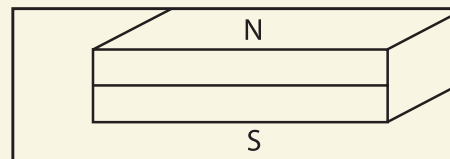
### Magnetic Pole Alignment\*\*



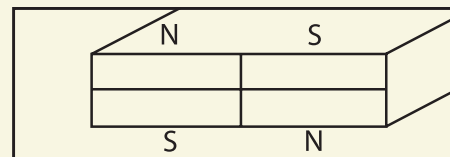
Multi-pole



Conventional through width



Conventional through thickness



Two poles on each face

### Machinability

Magnum® brand flexible magnetic strip and custom profiles cut cleanly and easily, and don't require grinding, as do ceramic magnets.

### Weatherability

Our material performs well in adverse weather (such as rain, sleet and snow), and in temperatures from -15° F to 160° F (-26° C to 71° C).

### Safety

Testing shows that certain Magnum® flexible magnetic materials meet child safety standards. Call us for details.

### Typical Physical Properties

(Standard Energy Magnet)

**Hardness:** Shore D60

**Specific Gravity:** 3.5

**Shrinkage:** <1.5% @ 158° F (70° C), 7 days

**Tensile Strength:** 700 psi (49 kg/cm2)



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